



2011 Military Health System Conference

Big Things on the Horizon for Electronic Health Records and Communication with our Partners

The Quadruple Aim: Working Together, Achieving Success

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Agenda



- James A Lovell Federal Health Care Center (JAL FHCC)
- Virtual Lifetime Electronic Record (VLER)
- Electronic Health Records (EHR) Way Forward
- National Health Focus

JAL FHCC

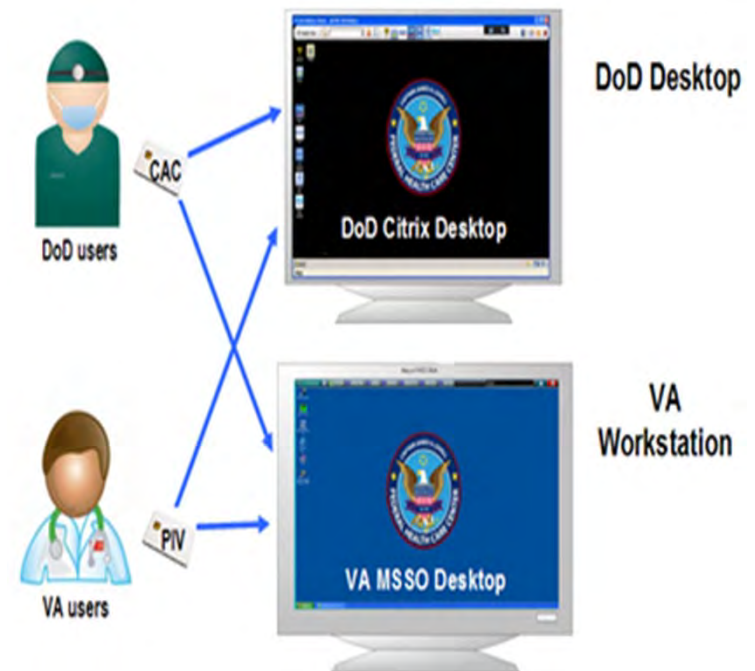


- First single, Fully Integrated Federal Health Care Center Between the VA and DoD
- Designed to improve access, quality, and cost effectiveness of health care delivery to beneficiaries of both DoD and VA

JAL FHCC Capabilities Delivered



- **Single Patient Registration**
 - Sign on once with a DoD CAC or VA PIV
- **Medical Single Sign-On**
 - Find a patient one time in any application and other applications follow automatically



JAL FHCC Future Capabilities



- **Orders Portability (OP) for Laboratory and Radiology**
 - View, manage and display in a computable format
 - Display images within either VHA or DoD imaging systems
- **OP Pharmacy**
 - Reconcile medication and allergies for all patients; reachable 24/7 for discharge medications
- **OP Consults**
 - Will allow consults and referral orders for processing for all patients using either DoD or VA health information system



JAL FHCC- Screen Shots

Patient information is automatically found & displayed in other applications (context) including VistA & CPRS

The screenshot displays a Citrix online plug-in window titled 'MHS FHCC Desktop - Citrix online plug-in'. The desktop environment includes a taskbar with icons for 'ZZTEST, GLOBAL', 'Vista', and 'CPRS'. A yellow arrow points from the text overlay to the taskbar area.

On the desktop, there are several applications open:

- Appointment List:** A window showing a list of appointments for 'ZZTEST, GLOBAL'. The list includes columns for Date/Time, Clinic/Div, HCP, MEPRS/DMIS Type, Status, and Reason. The data is as follows:

Date/Time	Clinic/Div	HCP	MEPRS/DMIS Type	Status	Reason
15Dec@1200	BTFP/200H	QQQCHCSIITESTDOCTOR,	BGAA/0056 ACUT	KEPT	AHLTA
13Dec@1529	BTFP/200H	QQQCHCSIITESTDOCTOR,	BGAA/0056 ACUT	KEPT	AHLTA
05Dec@1152	BTFP/200H	LEE, NORMAN	BGAA/0056 OPAC	KEPT	AHLTA
04Dec@1556	INTM/200H	MALDONADO, FRANK A	BAAA/0056 ACUT	KEPT	AHLTA

- VISTA North Chicago:** A window showing patient information for 'ZZTEST, GLOBAL'. The patient's name is 'zztest,global GLOBAL'. The patient's SSN is '1-1-80 309010'. The patient is a 'NSC VETERAN'. A warning message states: 'WARNING : ** This patient has been flagged with a Bad Address Indicator. Enrollment Priority: GROUP Bg Category: NOT ENROLLED End Date: 01/17/2003'. Another warning message states: '*** WARNING *** *** PATIENT ENROLLMENT ENDED EFFECTIVE 01/17/2003 ***'.

* The health record above contains sample test data used for demonstration purposes
2011 MHS Conference

JAL FHCC Challenges



- Complexity
 - Systems & Networks
 - Identity
 - Configuration Control

- Change Management



VLER Concept



2010.12.20
VLER CONCEPT



User Community

VLER Capability Areas & Points of View



VCA 4: Single Virtual Access Point for Health & Benefits: Self Help for Service Members & Veterans

VCA 4

Veteran Master Identity

VCA 2: Health Data Exchange for Veterans
Benefits Administration & Social Security
Administration Disability Benefits: Adjudicators
Helping Service Members and Veterans

VCA1:
Foundational
Clinical Health
Data Exchange
via Nationwide
HIN: Clinicians
Caring for
Service
Members &
Veterans

VCA 1



VCA 2



VCA 3



VCA 3:
Data Exchange for Housing,
Insurance, Education &
Memorial Benefits: Benefit
Providers Helping Service
Members and Veterans

Benefit and Service Providers



VLER Phase 1A Pilot Accomplishments



Tidewater Pilot

- Successful demonstration of capability to exchange data through NwHIN
- Beta testing, HHS CONNECT software
- On-boarding process for admitting new members to NwHIN

San Diego Pilot

- Demonstrated health information can be exchanged using NwHIN

VLER Tidewater C32 Data Exchange



MedVirginia Solutions - Lifescape Department of Veterans Affairs Department of Defense Summary Continuity of Care Document

MedVirginia

Continuity of Care Document

NOTE: This C32 may not constitute a complete record.

Summarization of Episode Note
Created On: October 6, 2010

Patient:	CHDRONE CHDRZZZTESTPATIENT 1234 Howard St. LA JOLLA, CA, 92038 661-555-1234	Patient ID:	101725718EV299033	
Birthdate:	[REDACTED]	Gender:	M	Marital Status: Married
Language(s):	UNK	Religious Affiliation:		
Source:	Department of Veterans Affairs			

Table of Contents

- [Allergies](#)
- [Problems/Conditions](#)
- [Medications - Prescription and Non-Prescription](#)
- [Vital Signs](#)
- [Lab Results - Chemistry and Hematology](#)
- [Immunizations](#)

Allergies

Allergens	Reaction	Severity	Verification Date	Source	Event Type	Comments
CHOCOLATE	RASH	--	29 Aug 2010	EAST ORANGE VA 52N JERSEY HCS	Adverse reaction to substance	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.
PENICILLIN	DRY MOUTH, URTICARIA	--	14 Jan 2010	RAMPTON (VAMC)	Adverse reaction to drug	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.
ONYXODONE	ANXIETY	--	14 Jan 2010	RAMPTON (VAMC)	Adverse reaction to drug	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.
SHELLFISH	RASH, DIARRHEA	--	23 Sep 2009	SAN DIEGO HCS	Adverse reaction to food	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.
ASPIRIN	RASH, ITCHING OF EYE	--	23 Sep 2009	SAN DIEGO HCS	Adverse reaction to drug	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.
WATERPOX	ITCHING OF EYE, DIARRHEA, SWELLING	--	14 Dec 2009	SAN DIEGO HCS	Adverse reaction to food	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.
PEANUTS	RASH, SWELLING	--	18 Dec 2009	SAN DIEGO HCS	Adverse reaction to substance	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.

* The health record above contains sample data used for demonstration purposes

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Joint EHR Modernization Objectives



- “EHR modernization efforts provide the opportunity to implement standards-based Health IT solutions that will modernize existing Department EHR capabilities...and (provide) reduced sustainment costs.” *

To achieve these objectives, the Departments will widely integrate business requirements, acquisition and technical approaches.

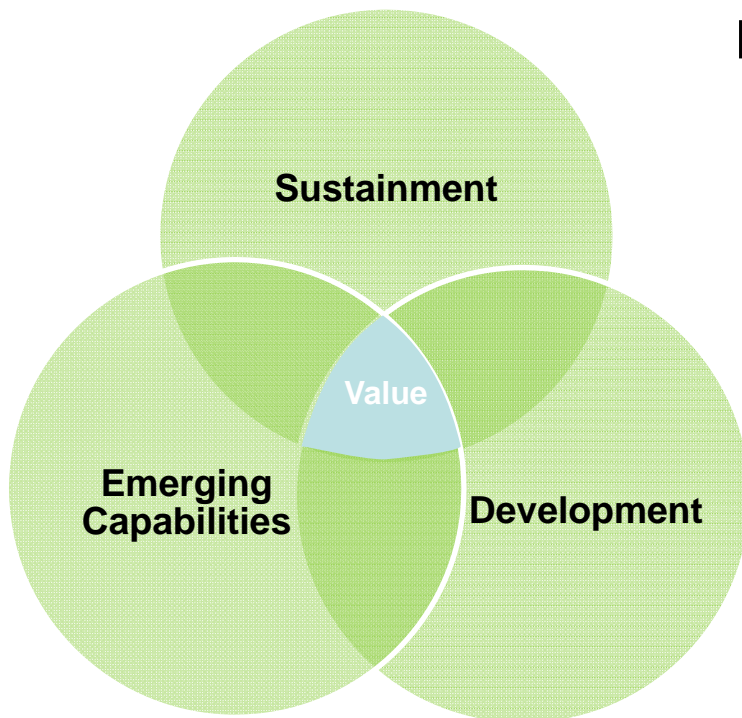
* Joint Executive Council and Health Executive Council Report to Congress (RTC) on Defense and Department of Veterans Affairs Medical Information Technology.

Joint EHR Modernization Objectives



- Both Departments are working toward common objectives:
 - Effectiveness:
 - Provide a patient-centric health care experience
 - Improve the quality of delivered services
 - Ensure interoperability and data sharing between the departments
 - Efficiency:
 - Reduce overall cost of Health IT investments in acquisition, development and sustainment

EHR Transformation Focus



- Clinical Informatics
- System Engineering
- Interagency Synchronization

Military Health System EHR Efforts

Sustainment

- Availability, Usability, Speed
- Establish a reasonable baseline (Theater & Garrison)
- Right people in the right seats
- Patient safety/compliance

Development

- Engineering & Innovation
- Integration/Interoperability
- Repurposing

Emerging Capabilities

- Functional & Technical testing labs
- Balance of Theater/Garrison priorities
- DoD/VA synchronization

Mission Focused EHR Way Ahead Approaches*

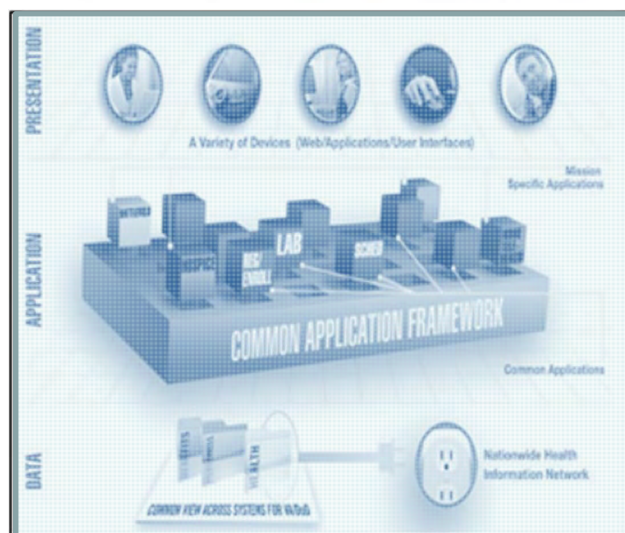


Figure 1: VA EHR Modernization Strategy

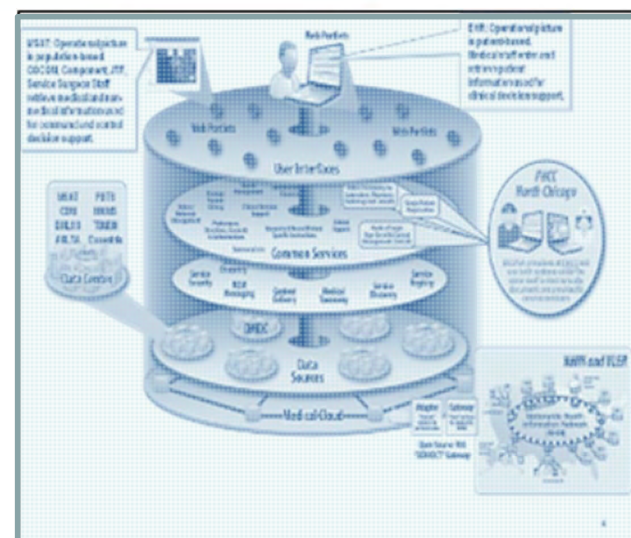
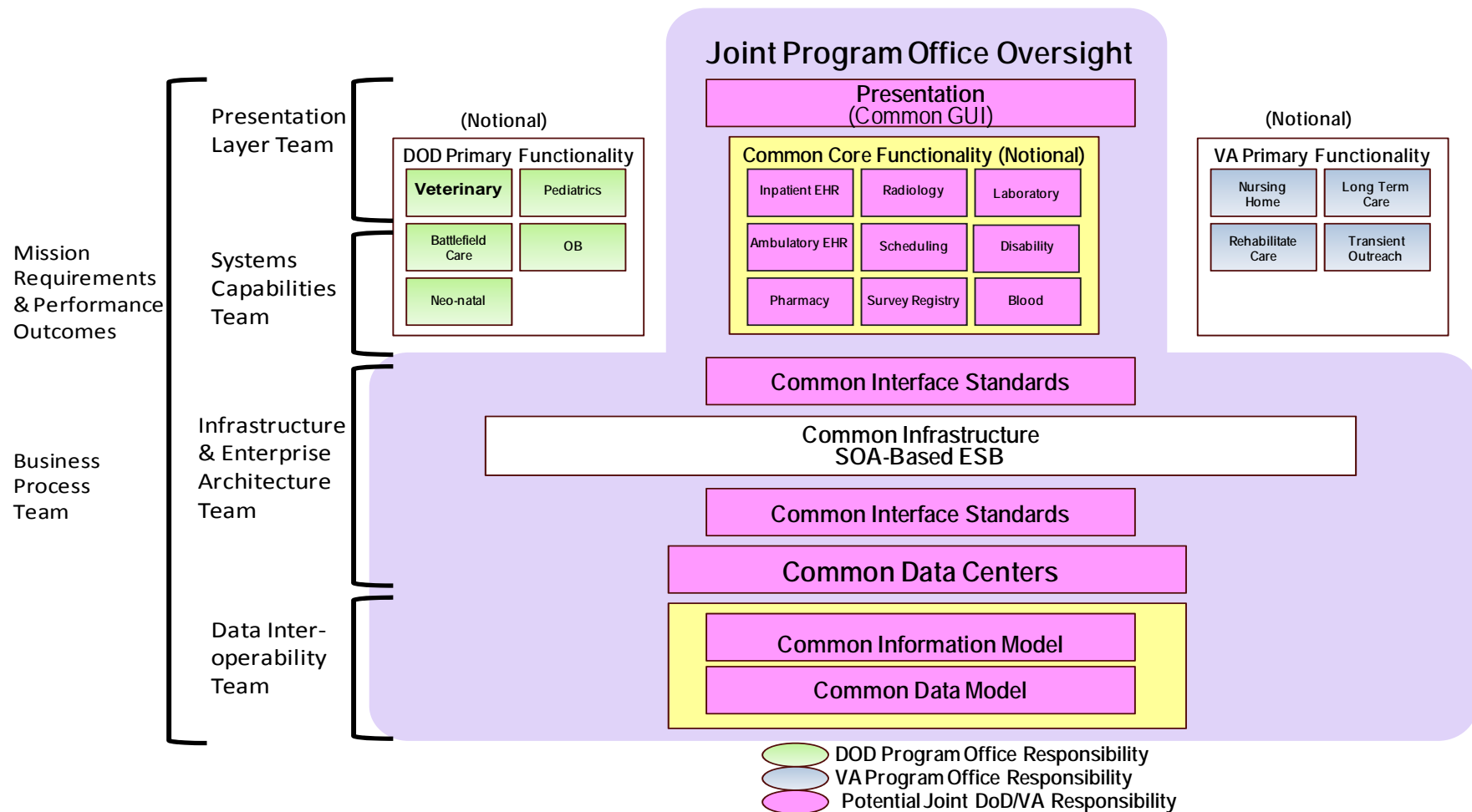


Figure 2: MHS Technical Modernization Strategy

VA Approach	DoD Approach
<ul style="list-style-type: none"> • Employ an iterative, collaborative approach to evolving business processes 	<ul style="list-style-type: none"> • Develop detailed “to be” workflow processes
<ul style="list-style-type: none"> • Leverage commercial innovation (open source) 	<ul style="list-style-type: none"> • Use commercial off the shelf (COTS) software without modifications where possible
<ul style="list-style-type: none"> • Provide architecture and data management guidelines (SOA) 	<ul style="list-style-type: none"> • Innovate at applications layer while using core common enterprise services (SOA)
<ul style="list-style-type: none"> • Build from VistA legacy using new application interface 	<ul style="list-style-type: none"> • Use modular COTS upgrades to transition from legacy

* From Joint DoD and VA Health IT Modernization Way Forward briefing (7 October 2010)
2011 MHS Conference

Common Design Pattern & Framework



EHR - Where We Are Now



DoD/VA interagency teams (working the “what”):

- Mission requirements and performance outcomes
- Business processes
- Presentation layer
- Systems capabilities
- Infrastructure and enterprise architecture
- Data interoperability

Target outputs for path forward (addressing the “how”):

- Agreement on a common vision and definition of an interagency EHR
- Produce a Clinical Interoperability Framework & Common Clinical Data Model
- Develop a Common Business Reference Model/Capability Taxonomy
- Establish a prioritized Common Clinical EHR Capability
- Develop a Common User Interface using user/patient centric agile methods
- Establish a common Segment Architecture Framework


Intuitive Interface




* The health record above contains sample data used for demonstration purposes

The Blue Button- VA




**UNITED STATES
DEPARTMENT OF VETERANS AFFAIRS**

VA Home



May 2010
**Women's Health
Month**



VA Facility Locator | About MHV | Help | FAQs | Contact MHV | Search: **GO**


HOME | **PERSONAL INFORMATION** | **PHARMACY** | **RESEARCH HEALTH** | **GET CARE** | **TRACK HEALTH** | **MHV COMMUNITY**

IN CASE OF EMERGENCY | **PROFILES** | **ACCOUNT** | **HEALTH INFORMATION CARD**

Personal Information


My HealtheVet (MHV) has made it easy to keep track of your Personal Information. MHV is all about you and your health. Part of your personal online health journal is your identification. When you registered for My HealtheVet, you entered important information about yourself. This is where you'll find it, along with other important facts like your login information, blood type and emergency contacts.

In Case of Emergency




Keep your emergency contacts in one place... [More »](#)

My Profile




Your name, address and identifying information... [More »](#)

Download your Data




Download, print, or share VA health data. It is simple, safe and reliable. [More »](#)

My Account



Manage your account, in-person authentication... [More »](#)

Change your Password



Change your My HealtheVet password here... [More »](#)

Member Logout

Logout

Quick Links

- [VA National Suicide Prevention Hotline](#)
If you are in crisis call:
1-800-273-TALK (8255)
- [In-Person Authentication](#)
- [Flu Information](#)
- [My HealtheVet Learning Center](#)
- [VA Mental Health Services](#)
- [View the MHV](#)

View My Links Information (self-entered)
(Personal Health Journal of)



The Blue Button- TRICARE

[Home](#) [Resource Center](#) [My Profile](#) [Family Profile](#) [Logout](#)



Welcome to TRICARE Online!
TRICARE Online features secure access to beneficiary appointments, prescriptions, and personal health data.

Welcome, [Redacted]

 [Secure Messaging Pilot Program](#)
 [Need Help? MHS Help Desk 1-800-600-9332 \(CONUS\) or 1-866-637-8725 \(OCNUS\)](#)
Looking for information about your benefits?
[Visit the TRICARE Beneficiary Site](#)



[Beneficiary Home](#)

Your Family's Sponsor is [Redacted] [Help](#)

Name	Date of Birth	Gender	Primary MTF
[Redacted]			

Family Member list last updated: 11/19/10 3:59 PM [Refresh list of family members](#)

[Appointment Center](#) [Help](#)

 **Notice:** This site should not be used for emergency medical conditions. In the case of a medical emergency, call 911 or contact your local Emergency Medical Service.

Select Family Member: [Go](#)

Book an Appointment for Myself
Select the visit reason from the list, click on the 'View Appointments' button, and follow the steps.

MTF Site Message: MTF Specific Appointing Text

Select Visit Reason: [View Appointments](#)

View or Cancel Appointments for Myself
There are no future appointments currently booked.

Announcements [view all](#)

- + [Coming soon: TRICARE Online family member booking!](#)
- + [Ensure you have access to upcoming TRICARE Online features!](#)

 Accessing your [Personal Health Data](#), containing your labs, allergy profile, medication profile, problem list, and encounters.

Refill
 [Refill](#) and check status of your prescriptions. Access Mail Order Pharmacy

CHART
 Access [CHART](#), the Consolidated Health Assessment Reporting Tool, which combines health assessment and deployment-related questionnaires in one place.

eForms
 Access [eForms](#) to complete your health-related paperwork electronically, prior to your appointment.



REPORT TO THE PRESIDENT
REALIZING THE FULL POTENTIAL OF
HEALTH INFORMATION TECHNOLOGY
TO IMPROVE HEALTHCARE
FOR AMERICANS:
THE PATH FORWARD

Executive Office of the President
President's Council of Advisors
on Science and Technology

December 2010



Wrap-Up



- Expectations for future VLER pilots and the future of the Virtual Lifetime Electronic Record
- Alternatives for the EHR Way Ahead
- Role of patients in future clinical work flow
- National focus on health care